

---

# National Association of State Foresters

## Position Statement – February 2003

---



### PRINCIPLES AND GUIDES FOR A WELL-MANAGED FOREST

*A report by the Sustainable Forest Management  
and Resource Management Committees  
National Association of State Foresters  
February 2003*

#### Background

The exact definition of a well-managed forest will be debated as long as there are interest groups that value different sets of attributes available from a forest. There are, however, a number of frameworks commonly perceived to address key components of a well-managed forest, e.g., the World Summit on Sustainable Development, the United Nations Forum on Forests Proposals for Action, the Montreal Process Criteria and Indicators of Sustainable Forests, and the International Forest Industry Roundtable. Fundamental to all is the premise that forests are recognized as a community of interacting plants, animals, soil, water, air, and people within a major landscape – no longer just a concentration of trees.

#### Introduction

Forest owners as well as the general public are increasingly aware of promoting and working towards sustainability for the nations forests. Interest in understanding how to pursue well-managed forests can, at times, be confusing due to the wide range of definitions, goals, and perspectives being promoted by stakeholders with different interests. The National Association of State Foresters developed these Principles and Guides as a means to assist in assessing the potential effectiveness of any system or program's capacity to guide a forest owner or manager in efforts to achieve a well-managed forest while attaining his/her objectives.

The Principles and Guides should **not** be used as a directive **nor** are they an appropriate basis for determining eligibility for incentives related to federal cost share programs. They **are** designed to help state forestry agencies, forest landowners, and other interested members of the public sort through the options available to determine which systems and programs meet widely accepted tests of appropriate content and outcomes. Size or scale of the management unit or ownership is an essential consideration in their use.

## **I. Principles of a Well-Managed Forest**

Any system or program professing to result in a well-managed forest when implemented, should address the premise of the following principles in its requirements for planning, implementation and assessment:

1. Contribute to the Conservation of Biological Diversity of the Forest and the Landscape in Which it Resides
2. Maintain or Improve Productive Capacity
3. Maintain the Health and Vigor of the Forest and its Landscape/Watershed
4. Protect Soil and Water Resources
5. Consider Carbon Cycles
6. Consider Socio-Economic Benefits and Impacts
7. Comply with Laws and Legally Adopted Rules and Implement Applicable Guidelines in States Not Using the Regulatory Approach

## **II Performance Guides to Address the Core Principles in Evaluating Program / System Implementation**

An evaluation of the systems and plans/practices to determine whether the Core Principles have been addressed can be done using the following Performance Guides:

### **1. Contribute to the Conservation of Biological Diversity of the Forest and Landscape in Which it Resides**

#### **Systems**

- A. Available expertise is sought for assessing biodiversity considerations at the site and landscape levels.
- B. Rare and endangered species and plant communities are identified and their protection or enhancement is addressed.
- C. Forest dynamics, major disturbances and catastrophic events are factored into decision making.

#### **Plans and Practices**

- A. Necessary expertise (consultants, State Forestry, Natural Heritage Program staff, etc.) has been utilized to assess the biodiversity contribution of the property.
- B. The forest's diversity, uniqueness and risks (pests, fire, weather, etc.) have been identified and are a consideration in management.
- C. Forest dynamics, major disturbances and catastrophic events are factored into biodiversity decision making.

## 2. **Maintain or Improve Productive Capacity**

### **Systems**

- A. Timber and non-timber products and habitats are identified for the forest.
- B. Long-term and short-term productive capacities and targets are established.
- C. Targets are sustainable.
- D. Appropriate science and technology is used.

### **Plans and Practices**

- A. The productive capacity of the forest has been mapped for timber and significant non-timber products have been identified.
- B. Growth, mortality and harvest rates of the forest types have been determined.
- C. Regeneration after harvest is planned and successfully implemented.
- D. Long-term site capacity is maintained.
- E. Harvest, utilization, and marketing are efficient.
- F. Loggers and other contractors that have been trained are used.
- G. Appropriate expertise is used regarding wildlife management.
- H. Habitats, including sites at environmental risk and with ecological/cultural uniqueness, are identified and a consideration of management.

## 3. **Maintain the Health and Vigor of the Forest and its Landscape/Watershed**

### **Systems**

- A. Tree species selection, stocking levels, age class distribution, integrated pest management and fuel loadings are addressed with the objective of reducing the risk of insect and disease outbreaks and unwanted wildfire and promoting long-term forest vigor.
- B. Cooperation regarding forest risk assessments, monitoring, prevention and incident response is encouraged.
- C. Chemicals are used appropriately and safely within the manufacturer's recommendations.
- D. Grazing is managed to prevent negative impacts.

### **Plans and Practices**

- A. Tree species selection, stocking levels, spacing, age-class distribution, regeneration methods, insect and disease outbreaks, fuel loads, and wildfires are managed to reduce risk and insure long-term forest vigor.
- B. Fuel loads, insect and disease populations and overall forest vigor are addressed.
- C. Approaches to monitoring, prevention, and incident response are in place and include cooperation with local, state and federal agencies and neighboring landowners as appropriate.
- D. Grazing is managed to prevent negative impacts.
- E. Introduction and spread of invasive non-native flora and fauna is addressed.

## 4. **Protect Soil and Water Resources**

### **Systems**

- A. Relevant mapped, soils, terrain and water resources (streams, ponds, wetlands) data are used.

- B. Management practices to insure soil stability, protect and enhance soil productivity and water quality are used.
- C. Best management practices to protect soil and water during all management activities are used.

#### **Plans and Practices**

- A. Current mapped data on soils and terrain is included in the plan and used in management.
- B. Storm dynamics are recognized and planned for.
- C. Soil stability, water quality and soil productivity are protected.
- D. Appropriate guides and plans are in place and followed in road placement, design, maintenance and retirement, especially at stream crossings.
- E. Fire use, management and response is appropriately planned and conducted.
- F. State Best Management Practices are understood and incorporated in plans and complied with during all phases of management activities.
- G. Wetland hydrological function and aquatic habitat are a consideration in management.

### **5. Consider Carbon Cycles**

#### **Systems**

- A. Forest biomass considerations by forest types, age classes and successional stages are addressed.
- B. The management of forest ecosystems in a manner that enhances carbon budgets and cycles is promoted.

#### **Plans and Practices**

- A. Carbon cycles are considered in the forest management plan.

### **6. Consider Socio-Economic Benefits and Impacts**

#### **Systems**

- A. The system recognizes that production and consumption of wood and non-wood products, their volume, value (including value added through downstream processing), their supply and consumption are important.
- B. Recreation and tourism is promoted consistent with the health of the forest and the nature of the ownership and owner objectives.
- C. Appropriate economic and social values of the forest are considered.

#### **Plans and Practices**

- A. Sound economic approaches, considering both long-term and short-term goals, are used when harvesting both wood and non-wood products.
- B. Available resources are used to identify, manage and protect unique forest features.
- C. Unique biological, ecological, geological and cultural sites are considered in the forest management plan.

### **7. Comply with Laws and Rules and Implement Applicable Guidelines in States Not Using the Regulatory Approach**

#### **Systems**

- A. Conformance to all local, state and federal laws is required.

- B. Appropriate input is expected.
- C. Monitoring of implementation is expected.

**Plans and Practices**

- A. Local, state and federal laws, regulations and state BMPs are followed.
- B. Operations are planned, conducted and comply with safety rules.
- C. The impacts on neighbors and the community are considered during operations.
- D. Aesthetics are considered in plans and operations.
- E. Conversion to other land uses is only done according to local land use plans and ordinances.

---

**Sustainable  
Management Committee 2002-2003**

**ForestForest  
Management Committee 2002-2003**

**Resource**

James E. Brown, Chairman  
*Oregon*

Paul D. Frey, Chairman  
*Louisiana*

E. Austin Short, III  
*Delaware*

John C. Burwell  
*Oklahoma*

J. Fred Allen  
*Georgia*

Timothy C. Boyce  
*Alabama*

Bernie Hubbard  
*Michigan*

Philip Bryce  
*New Hampshire*

Ray Sowers  
*South Dakota*

Ray Sowers  
*South Dakota*

Steven G. Scott  
*Tennessee*

Raymond G. Aslin  
*Kansas*

Andrea E. Tuttle  
*California*

James R. Grace  
*Pennsylvania*

Thomas A. Dupree  
*Rhode Island*

Gene L. Francisco  
*Wisconsin*

Conrad M. Motyka  
*Vermont*

Thomas W. Osterman  
*Wyoming*

**NASF ACKNOWLEDGMENTS**

Gerald Rose, NASF

Mike Higgs, USDA Forest Service, State and Private Forestry/CF